

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
X	X	X	X	X	X
			X	DATE	
			REGISTERED CIVIL ENGINEER		
			PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					

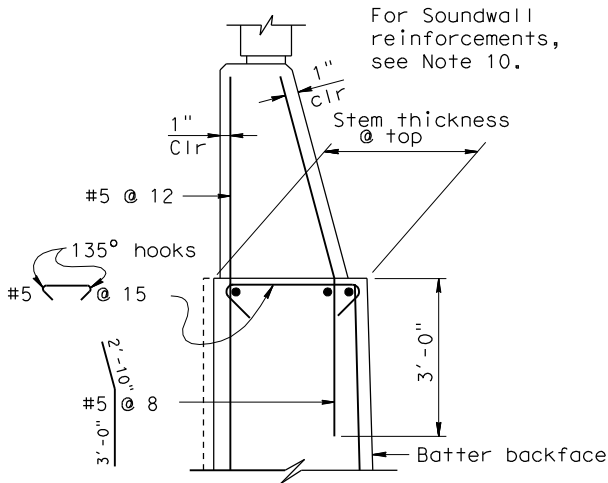
REGISTERED PROFESSIONAL ENGINEER

No. X

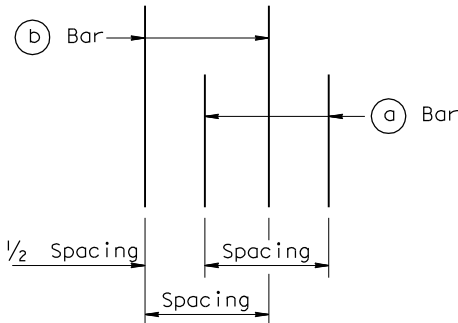
Exp. X

CIVIL

STATE OF CALIFORNIA



DETAIL A
WITHOUT HAUNCH

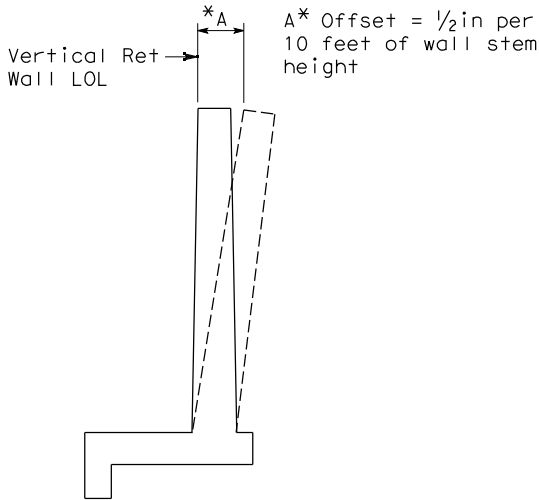


REBAR SPACING

No Scale

GENERAL NOTES

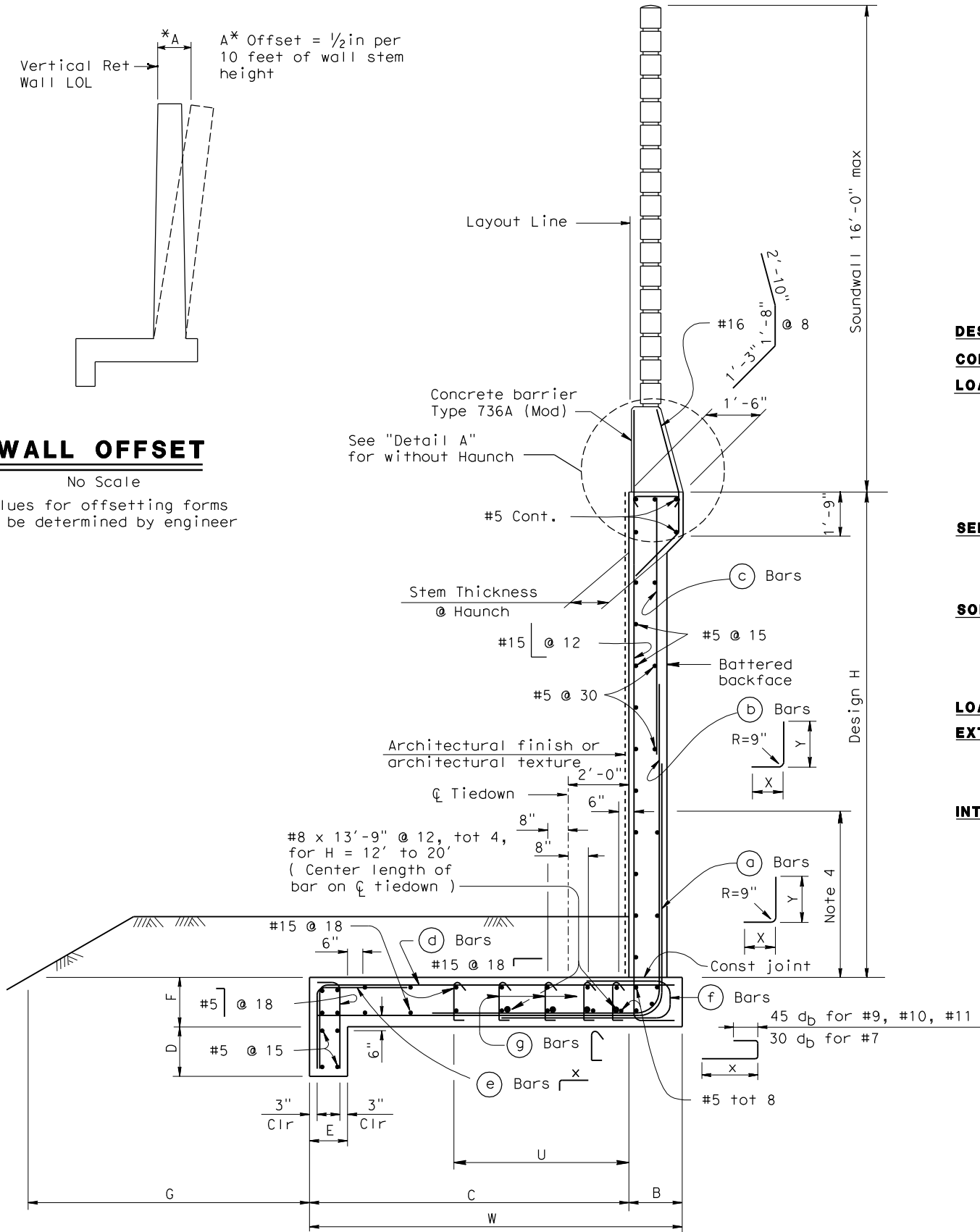
1. For soundwall and retaining wall architectural finish or texture, see details elsewhere in project plans.
2. For details not shown and drainage notes, see B3-8
3. Footing coverage, 2'-0" minimum.
4. Limit of no splicing rebars = $H/3$.
5. Increasing stem thickness not permitted.
6. Place footing key concrete against undisturbed material.
7. Shift (a) bars, (b) bars, and (c) bars as required to clear formed hole for tiedown.
8. No reinforcements in footing key for $H = 8'$ to $H = 12'$.
9. Maximum distance from ϕ tiedown to edge of footing = $0.4(S)$.
10. For Soundwall & Barrier reinforcements see "Soundwall Masonry Block" Sheets in Standard Plans.



WALL OFFSET

No Scale

Values for offsetting forms to be determined by engineer



SPREAD FOOTING SECTION

No Scale

DESIGN DATA

DESIGN: Load Factor Design (LFD)

CONCRETE: Reinforced Concrete, $f'_c = 3600$ psi
 $f_y = 60,000$ psi

LOADING CASE:

Level ground with 240 psf live load surcharge and 16' Soundwall

Seismic Load = 0.3 Dead Load
Wind Load = 30 psf
Dead Load of Soundwall = 1414 lb/Lf
Dead Load of Barrier = 372 lb/Lf

SEISMIC LOAD: SOIL

$K_h = 0.3g$
 $K_v = 0.0$
 K_{ae} : Mononobe-Okabe Method

SOIL: $\phi = 34^\circ$ $\gamma = 120$ pcf
Equivalent fluid pressure:
STATIC = 36 pcf for determination of toe pressure
SEISMIC = Coulomb's Theory

LOAD COMBINATIONS:

EXTERNAL STABILITY:

Group 1 : $D + E + SC + 0.75T$ (F.S. Sliding > 1.5)
Group 2 : $D + E + SC + W + 0.75T$ (F.S. Sliding > 1.2)
Group 3 : $D + PYM + P_{av} + V + 1.0 T$ (F.S. Sliding > 1.0)

INTERNAL STABILITY: (LFD)

Group A : $\beta D + 1.7 E + 1.7 SC + 0.75 T$
Group B : $\beta D + 1.7 E + 1.3 W + 0.75 T$
Group C : (Stem) $1.0 D + 1.0 E + 1.0 EOD + 1.0 EQE$
Group C : (Footing) $D + PYM + P_{av} + V + 1.0 T$

Where : $\beta = 1.0$ or 1.3 whichever controls design

D = Dead Load
 E = Lateral Earth Pressure
 P_{av} = Vertical Earth Pressure
 SC = Live Load Surcharge
 W = Wind Load
 EOD = Seismic Dead Load
 EQE = Seismic Lateral Earth Pressure
 PYM = Probable Yield Moment
($1.3 \times$ Nominal Yield Moment of Stem)
 V = Possible Shear at Base of Stem associated with Probable Yield Moment
 T = Design Force for Vertical Tiedown

STANDARD DRAWING		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO.		X							
FILE NO. xs14-390-1x	APPROVAL DATE <u>July 2011</u>			X		RETAINING WALL TYPE 7SWB - DETAILS NO. 1							
				POST MILE									
				X									
DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. (02-02-11))				UNIT: X PROJECT NUMBER & PHASE: X		CONTRACT NO.: X		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES		SHEET	OF
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				0 1 2 3								X	X